VSC 700 & VSC 700D

HIGH RESOLUTION, COMPUTER-TO-VIDEO SCAN CONVERTERS

- RGBHV input on BNC connectors with buffered loop-through
- Three simultaneous scan-converted outputs:
  - — composite video
  - — S-video
  - — component video or RGB video
- Autoscanning up to 1600 x 1200
- Auto–Image™ setup
- Four horizontal filters and Five vertical (flicker) filters
- Genlocking capability
- Sizing & centering controls
- Zoom control with eight presets
- 60 factory presets and 16 auto memory locations
- Freeze function
- Internal color bar generator
- IR and RS-232/RS-422 remote control
- Optional (fourth) SDI digital output

VSC 700D

The Extron VSC 700 and VSC 700D high resolution, computer-to-video scan converters combine high performance processing, an expanded feature set, and value. Innovative technologies incorporated into the scan conversion engine improve video performance and enhance video output for integrated systems that utilize a variety of inputs.

Description

The Extron **VSC 700** and **VSC 700D** high resolution, computer-to-video scan converters combine high performance processing with an expanded feature set, including a BNC RGB input with a buffered loop-through output for easy integration. In addition, the VSC 700D offers an SDI digital output.

The VSC 700 and VSC 700D accept computer video signals with resolutions up to 1600 x 1200 and output a scan converted NTSC or PAL video signal as composite video, s-video, component video and/or RGB video. Both are designed to be integrated into applications such as videoconferencing, video recording, and viewing the images on an NTSC or PAL monitor or other display device. They may also be used in broadcast environments as both models have the ability to genlock to an external black burst signal.

Features

- **Autoscanning** – Automatically recognizes and adjusts for incoming computer video signals at resolutions up to 1600 x 1200, horizontal scan rates up to 100 kHz and vertical refresh rates up to 120 Hz.
- **Integration-friendly input** – The input is on female BNC connectors, eliminating the need for adapter cables and offering the proven reliability of BNC connections.
- **Buffered loop-through** – Provides for local monitor output on BNC connectors, enabling a signal to be easily monitored or distributed without using a distribution amplifier.
- **Three simultaneous outputs** – NTSC or PAL video outputs as RGBHV, RGBS, RGsB, or component video, S-video, and composite video.
- **Optional fourth SDI output (VSC 700D)** – A digital 4:2:2 output is available for incorporating digital video devices into environments such as video production studios, non-linear editing suites, staging events, and video broadcast studios.
- **Input memory presets** – Allow the scan converter to automatically recall up to 16 user presets, 60 factory presets, and eight zoom presets, accessible via RS-232 or the included IR remote. Each memory location stores filter, size, centering, and/or zoom settings for a source that can be instantaneously recalled during a presentation.
- **Auto–Image™ setup** – A press of a button automatically adjusts the sizing, centering, and filtering to optimize the output image. This can save an enormous amount of time and effort in fine-tuning displayed images.
- **High quality zooming and panning** – The VSC 700 models feature variable zoom up to 200% and allow panning across the screen. User-friendly positioning, including centering and sizing, is accessible through the front panel for quick and efficient image setup.
- **Horizontal and vertical filtering** – The VSC 700 models have four horizontal filters and five vertical (flicker) filter settings selectable through the front panel LCD navigation menus. Filters reduce jitter, improve image stability, and assure that minimal picture detail is dropped during scan conversion.

Features (Cont.)

- **Freeze button** – The input of the VSC 700 and VSC 700D can be frozen using the freeze button on the front panel. This feature allows the scan converter to capture a frame of video to display for an extended period of time, even after the source has been removed.
- **Genlock** – All video outputs (NTSC and PAL) can be synchronized to an external reference signal. Genlock capabilities make transitions cleaner in a timed system.
- **Internal color bar generator** – Both VSC 700 models include a color bar pattern for simplified setup of a display; it can also be set as the default output when there is no input signal present.
- **RS-232/RS-422 remote control** – A rear panel RS-232/RS-422 control port provides connection to a third-party control system utilizing Extron's Simple Instruction Set (SIS™) of basic ASCII code, which provides easy operation of the VSC 700 scan converters.
- **Downloadable firmware** – The newest firmware can be conveniently downloaded from the Extron Web site. Updates for new features and capabilities can be easily upgraded through the RS-232/RS-422 port.
- **Executive Mode** – Ideal for unsecured environments, executive mode enables the user to lock out all front panel functions except for centering controls; all other functions remain active through RS-232/RS-422.
- **Flexible mounting options** – The VSC 700 models are housed in 1U high, half rack width metal enclosures that can be mounted under or through a desk or in a rack.
- **Internal International power supply** – The 100-240VAC, 50/60 Hz, auto-switchable, internal power supply provides worldwide power compatibility.
- **VSC Remote** – The included Extron VSC Remote provides infrared remote control for the VSC scan converters. It performs most front panel functions such as image freeze, zoom in and out, size and shift both horizontally and vertically, vertical filter adjustment, and preset settings.

VSC Remote

VIDEO INPUT

Number/signal type	1 RGBHV, RGBS, RGsB with 1 buffered loop-through
Connectors	2 x 5 female BNC (5 for input, 5 for loop-through)
Nominal level	0.7V p-p for RGB
Minimum/maximum levels	0V to 2.0V p-p with no offset
Impedance	75 ohms
Horizontal frequency	Autoscan 24 kHz to 100 kHz
Vertical frequency	Autoscan 50 Hz to 120 Hz
Resolution range	Autoscan 560 x 384 to 1600 X 1200
Maximum DC offset	0.7V
External sync (genlock)	0.3V to 1.0V p-p

VIDEO PROCESSING

Encoder	10 bit digital
Digital sampling	24 bit, 8 bits per color
Colors	16.8 million
Horizontal filtering	4 levels
Flicker filtering	5 levels
Encoder filtering	4 levels

VIDEO OUTPUT

Number/signal type	1 RGBHV, RGBS, RGsB, or component video; 1 S-video 1 NTSC/PAL composite video; 1 SDI component video (VSC 700D only)
Connectors	5 BNC female: RGBHV/RGBS/RGsB/component video; 1 BNC female: SDI component video; (VSC 700D only) (1) 4-pin mini DIN female: S-video; 1 BNC female: composite video
Nominal level	0.7V p-p for RGB
Minimum/maximum levels	0.0V to 1.0V p-p
Impedance	75 ohms

SYNC

Input type	Autodetect RGBHV, RGBS, RGsB
Output type	RGBHV, RGBS, RGsB
Genlock connectors	1 BNC female: genlock input 1 BNC female: genlock output (terminate w/75 ohms if unused)
Standards	NTSC 3.58, PAL
Input level	1.5V to 5.0V p-p
Output level	TTL: 5.0V p-p, unterminated
Input impedance	600 ohms
Output impedance	75 ohms
Max input voltage	5.0V p-p
Polarity	Negative

CONTROL/REMOTE — SCAN CONVERTER

Serial control port	RS-232/RS-422, 9-pin female D connector
Baud rate and protocol	9600, 8-bit, 1 stop bit, no parity
Serial control pin configurations	2 = TX, 3 = RX, 5 = GND
IR controller module	VSC Remote
Program control	Extron's control program for Windows® Extron's Simple Instruction Set™ (SIS™)

GENERAL

Power	100VAC to 240VAC, 50/60 Hz, 30 watts, internal, autoswitchable
Temperature/humidity	Storage -40° to +158°F (-40° to +70°C) / 10% to 90%, non-condensing Operating +32° to +122°F (0° to +50°C) / 10% to 90%, non-condensing
Rack mount	Yes, with brackets
Enclosure type	Metal
Enclosure dimensions	
VSC 700	1.75" H x 8.75" W x 10.5" D (1U high, half rack width) 4.4 cm H x 22.2 cm W x 26.7 cm D (Depth excludes knobs.)
VSC 700D	1.75" H x 8.75" W x 10.75" D (1U high, half rack width) 4.4 cm H x 22.2 cm W x 27.3 cm D (Depth excludes knobs.)
Product weight	
VSC 700	2.8 lbs (1.3 kg)
VSC 700D	2.9 lbs (1.3 kg)
Shipping weight	5 lbs (2.3 kg)
Vibration	ISTA/NSTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF	30,000 hours
Warranty	3 years parts and labor

Model	**Part Numbers**
VSC 700	60-477-01
VSC 700D	60-477-02
VSC Remote	70-206-01

Included Accessories

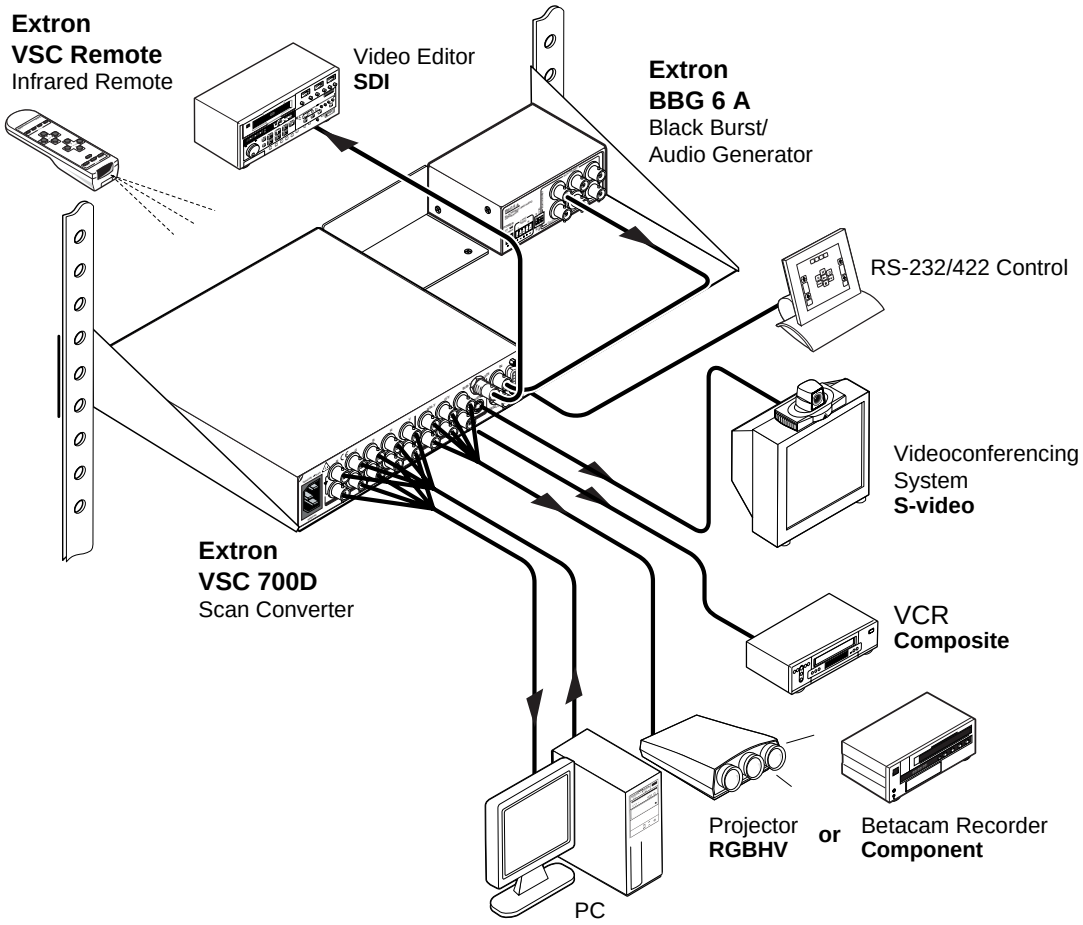
VSC IR Remote	70-206-01
BNC termination adapter	26-300-01
SVHSF 6′ (1.83 m)	26-316-02

Optional Accessories

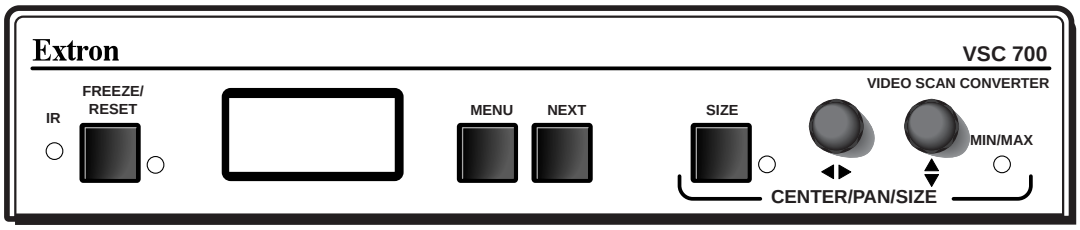
Under Desk mounting kit	70-219-01
1U Rack Shelf	60-190-01
SVHSM-BNCF SVHS (male) to BNC (Female) Adapter	26-353-01
RCA (female) to BNC (male) Adapter	10-264-01
SDI Output Card	70-065-02

Specifications are subject to change without notice.

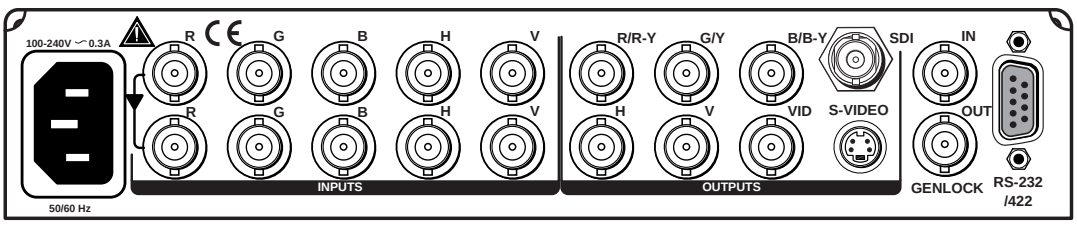
Application Diagram



Panel Drawings



VSC 700D Front



VSC 700D Back

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